Automatgevär m/ 42 B Manual

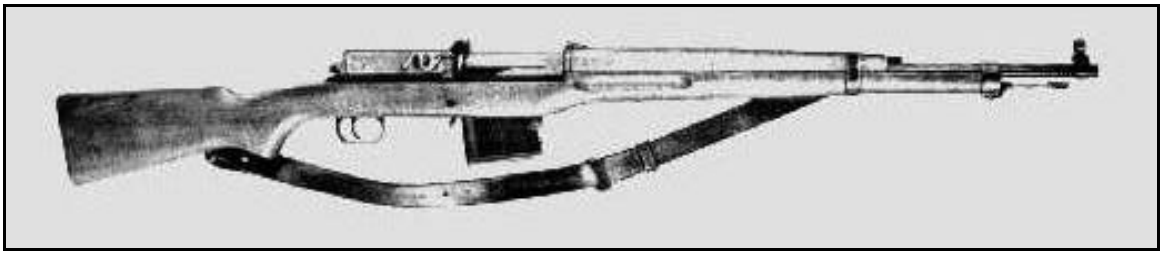
A translation from the 1969 Swedish Army Manual (SoldI Mtrl)
Translated by Anders & Petter.

Anders' website: http://www.geocities.com/Pentagon/Quarters/1106
Petter's website: http://user.tninet.se/~qro402y/index.html
The Swedish Military Firearms Message Board:
http://www.hotboards.com/plus/plus.mirage?who=swedeforum

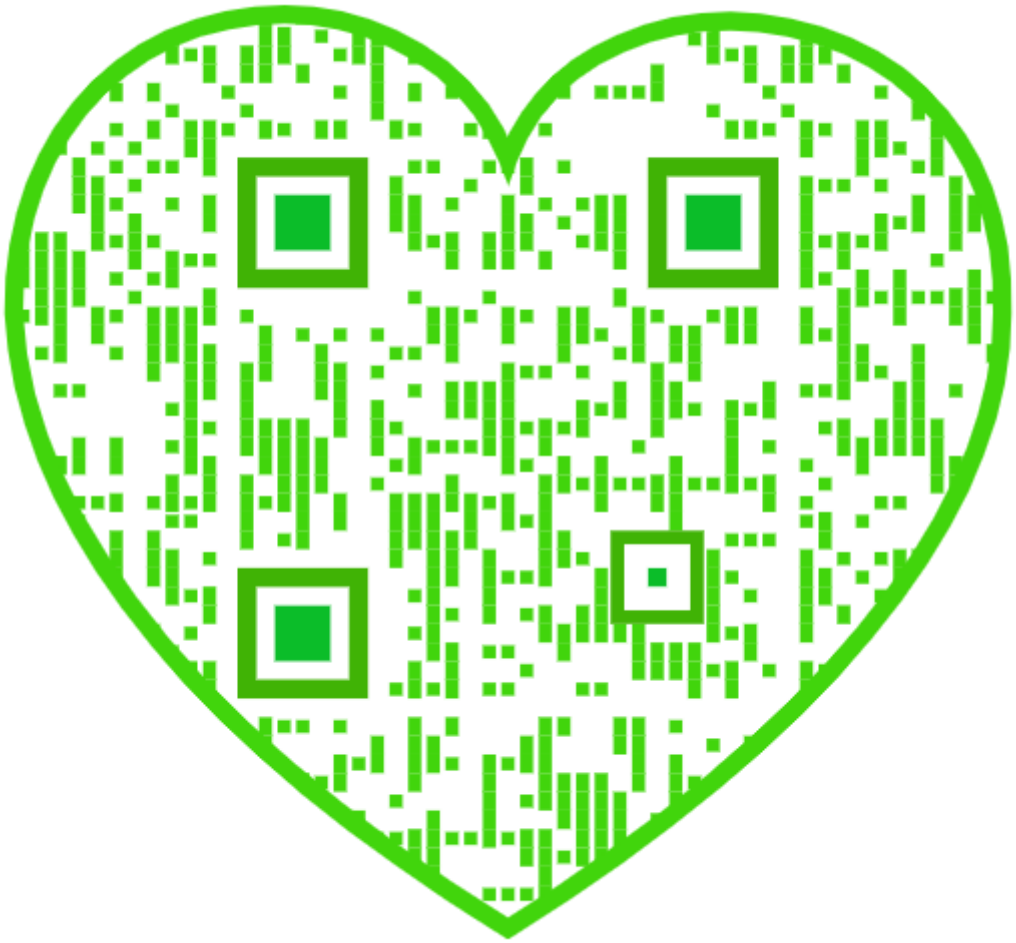
Note: Feel free to copy this manual and to pass it along to someone else. We only ask you to respect our copyright and not alter anything. Don't hesitate to contact us if you have any questions or feedback.

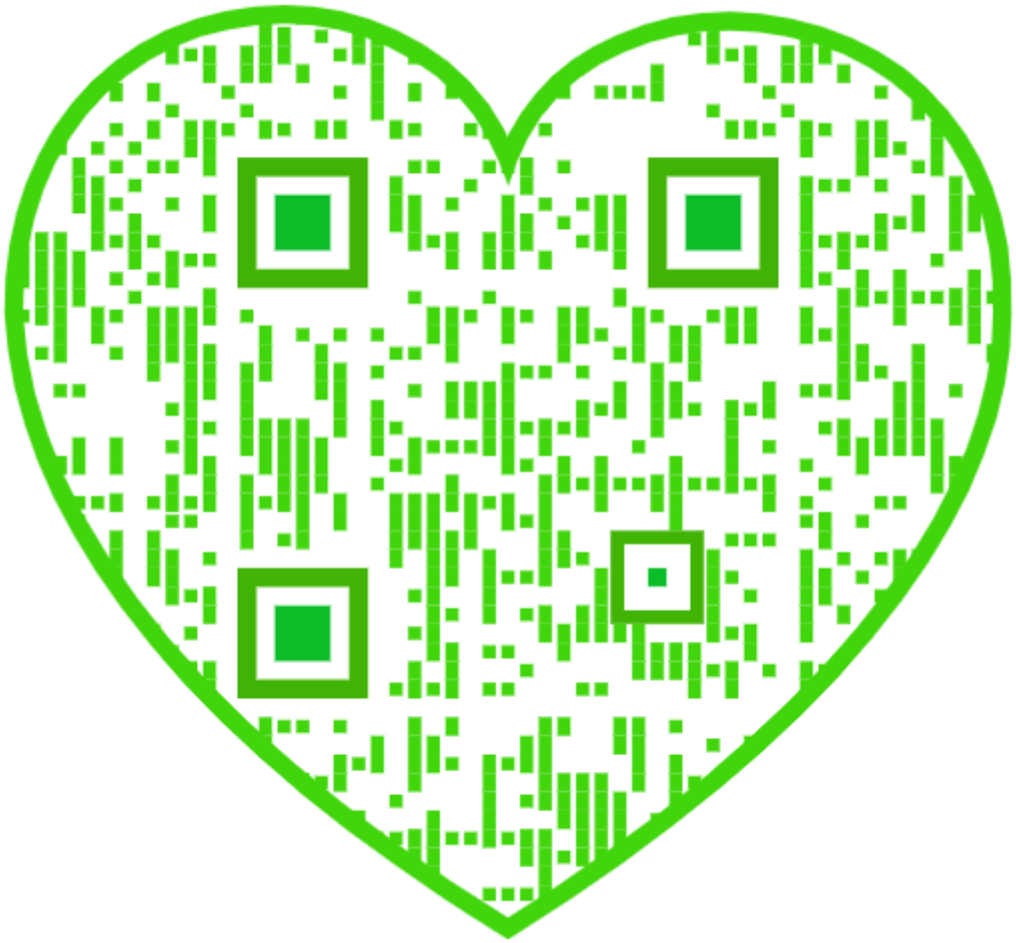
Contents

1. **General information**
2. **Accessories**
3. **Disassembly**
4. **Assembly**
5. **Sights**
6. **Bayonet**
7. **Blank firing device**
8. **Shooting gallery practice & semi-live ammunition**
9. **Loading**
10. **Unloading**
11. **Cleaning**
12. **Stoppages**
13. **Function**
14. **Low-light sights**



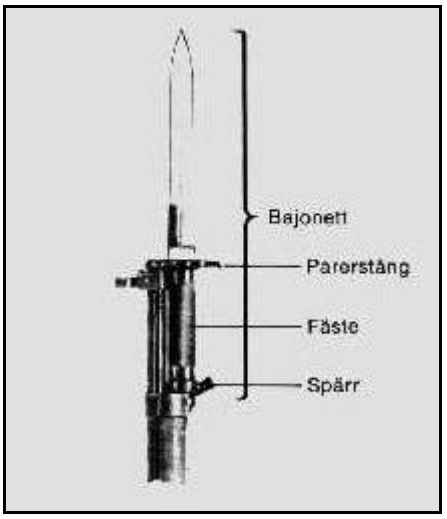
©2000 Anders & Petter.



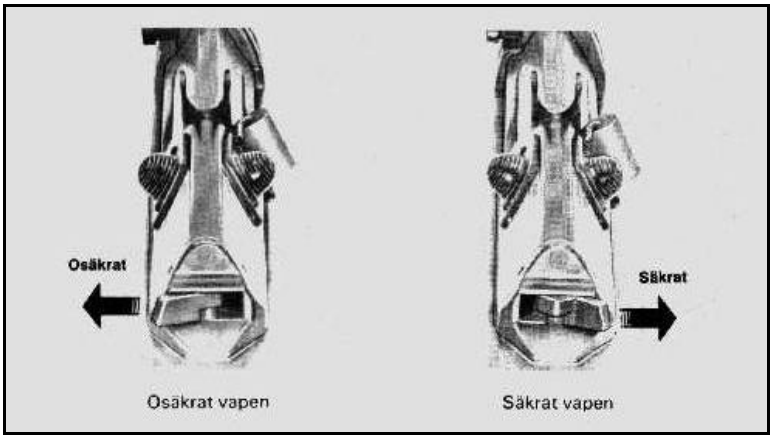


General information

The caliber is 6,5 millimeter. The magazine holds 10 rounds. The rifle is used with 6,5mm ammunition.
The rifle chambers a new round automatically between each shot fired. The trigger must be pulled for each shot fired. The trigger must be fully released in order to fire the next round.
The rifle weighs 5 kilo with a full magazine. A bayonet can be fitted.



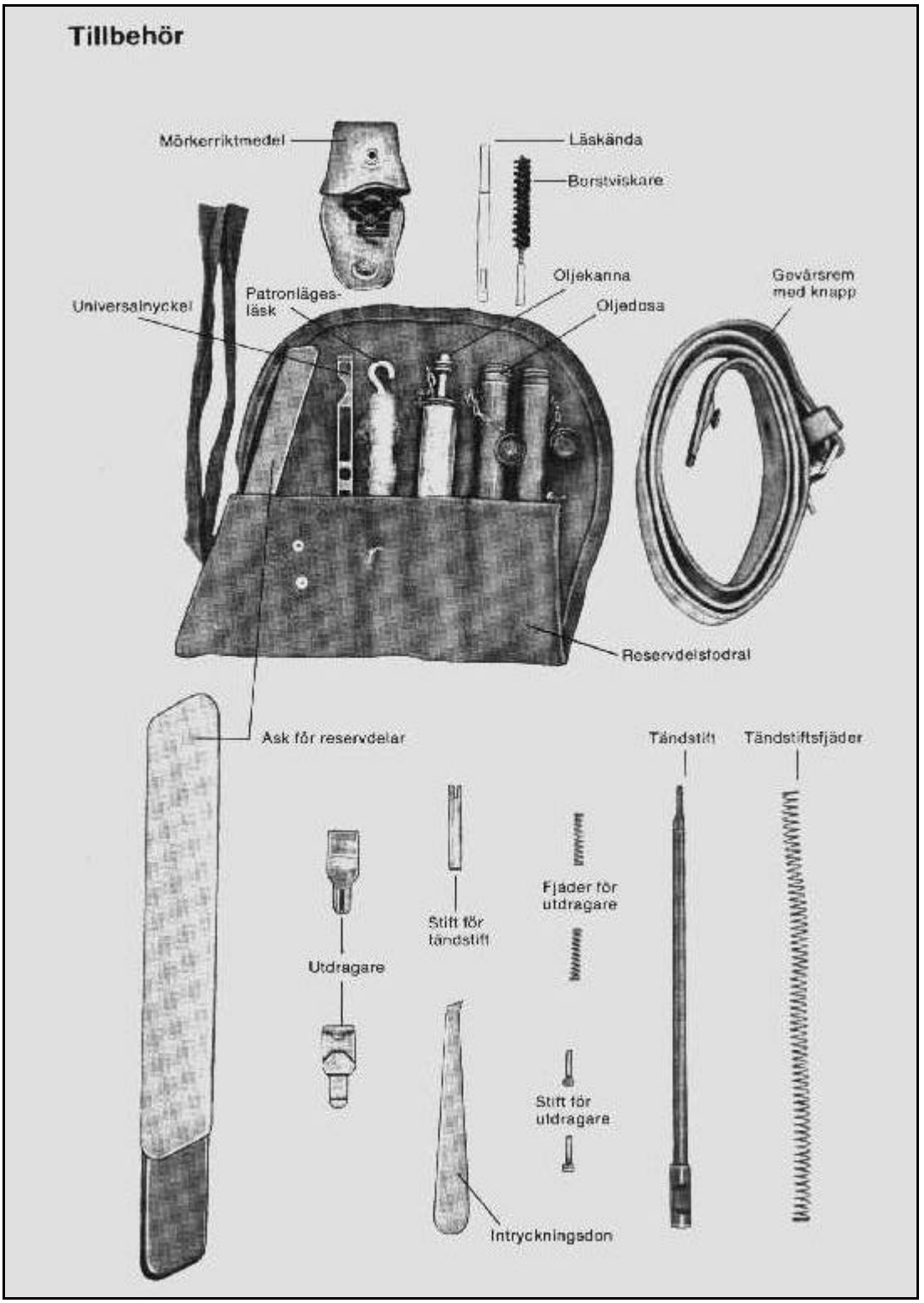
The rifle is ***safe*** when the safety lever is to the right.
The rifle is ***ready to fire*** when the safety lever is to the left.



1. **Accessories** (see picture below)

- Mörkerriktmedel = Low Light Sights
- Universalnyckel = Universal tool
- Läskända = Cleaning Rod Tip
- Borstviskare = Bore Brush
- Oljekanna = Oilcan
- Oljedosa = Oiler
- Gevärsrem med knapp = Rifle sling with button
- Patronlägesläsk = Chamber brush
- Reservdelsfodral – Case
- Ask för reservdelar – Spare parts box
- Utdragare – Extractor
- Stift för tändstift – Firing pin retaining pin
- Intryckningsdon – Extractor tool
- Fjäder för utdragare – Extractor spring
- Stift för utdragare – Extractor pin
- Tändstift – Firing pin
- Tändstiftsfjäder – Firing pin spring

©2000 Anders & Petter.

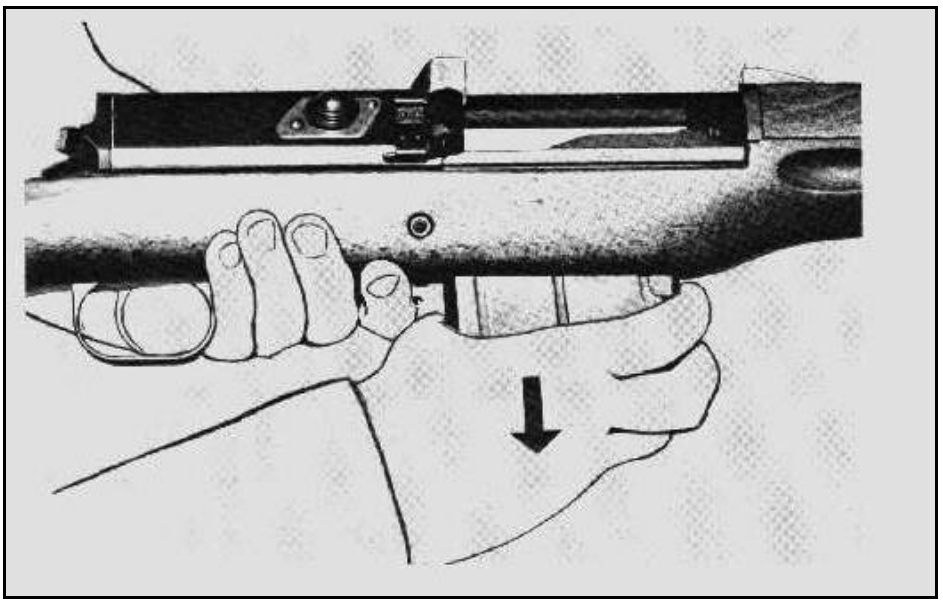


2. Disassembly

Before disassembling the rifle make sure it is unloaded.

If necessary, first remove the magazine. Push in the rear magazine latch with the index finger of the left hand. With the right hand, grip the magazine and pull the forward magazine latch. Pull down the magazine. The soldier is not allowed to disassemble the magazine.

©2000 Anders & Petter.



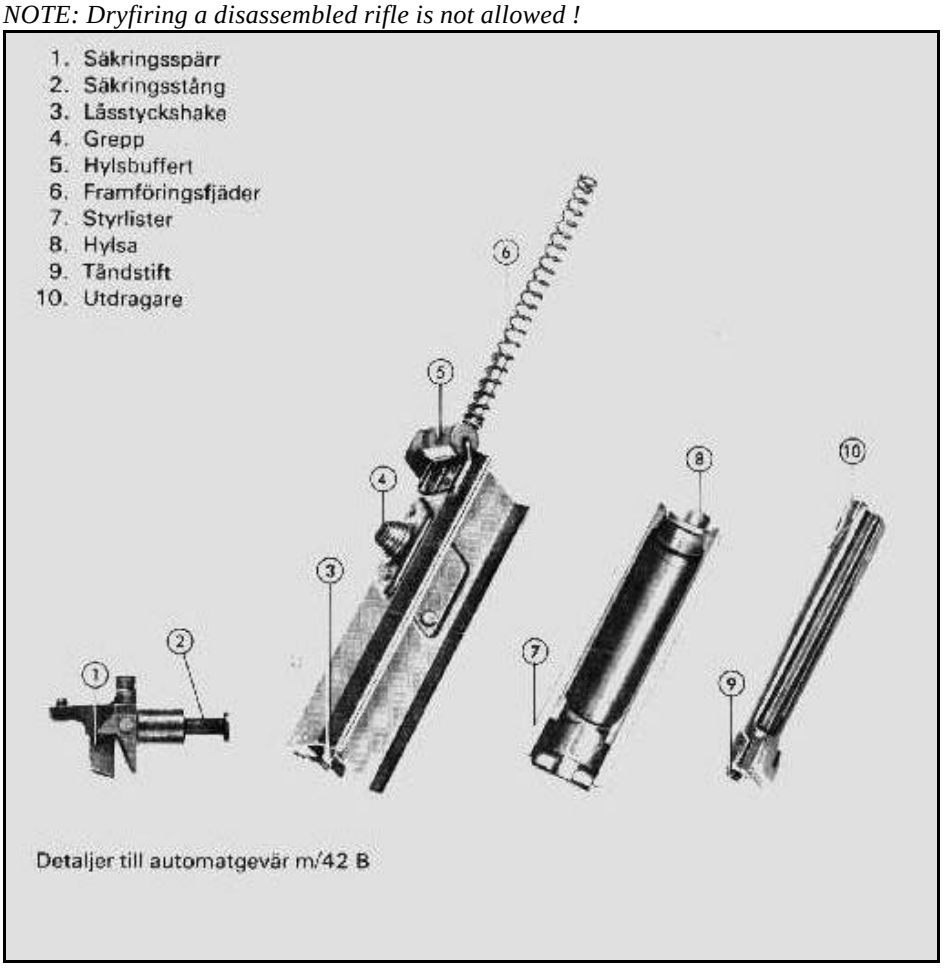
Push the cover forward a few centimeters until it is possible to lift out the receiver cap (safety assembly) and hold it there.

Hold the safety lever pointing rearwards and lift out the safety assembly.

Slowly release the cover. Remove cover and spring.

Cock the hammer and remove the bolt assembly. Take the bolt assembly apart.

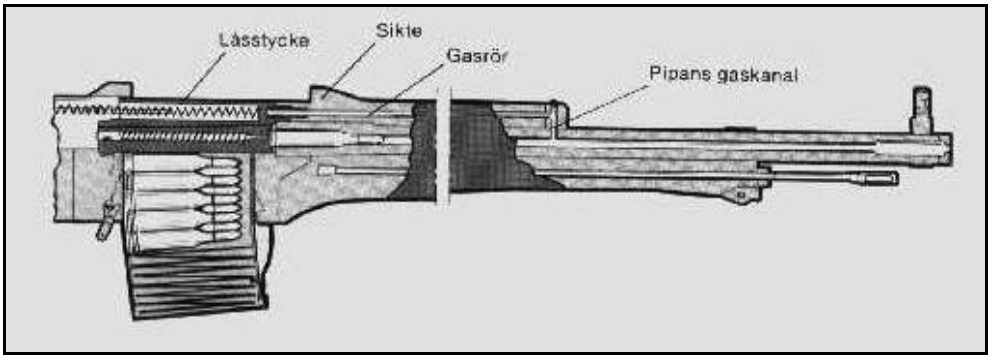
NOTE: Dryfiring a disassembled rifle is not allowed !



©2000 Anders & Petter.

1. Säkringsspärr – safety lever
2. Säkringsstång – Safety plunger
3. Låsstyckshake – Bolt carrier latch
4. Grepp – Grip knobs
5. Hylsbuffert – Case buffer
6. Framföringsfjäder – Follower spring
7. Styrlister – Guide rails
8. Hylsa – Bolt body
9. Tändstift – Firing pin
10. Utdragare – Extractor

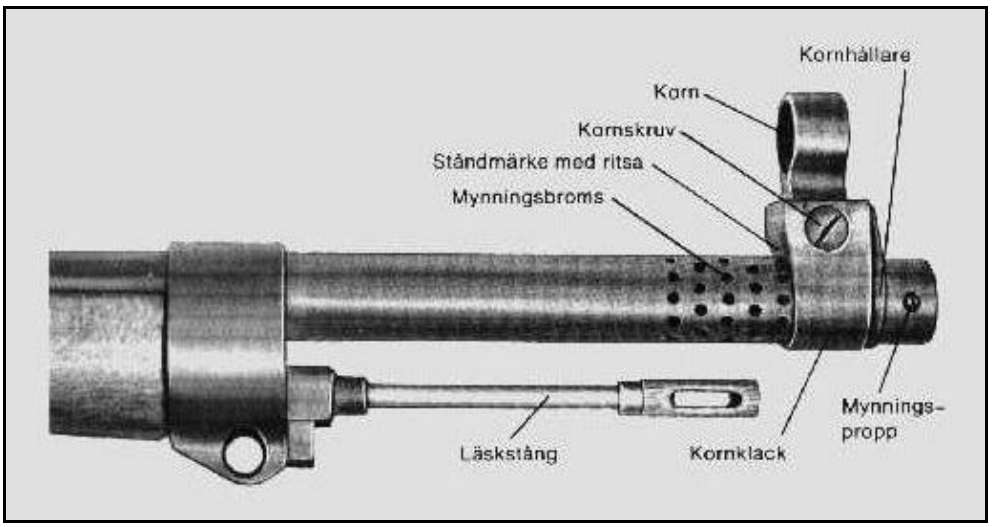
The case buffer protects the spent cases and also throws them in the right direction when firing. On the underside of the cover there is a rod which holds the recoil spring. The recoil spring consists of two parts, joined together by a splice cap. The springs are fragile, do not attempt to remove them from the cap.The forward end of the bolt carrier has a cylindrical portion. When the bolt carrier is forward in firing mode this part covers the rear end of the gas tube. The gas required for the functioning of the weapon is guided to the action through the barrel's gas cylinder and the gas tube.



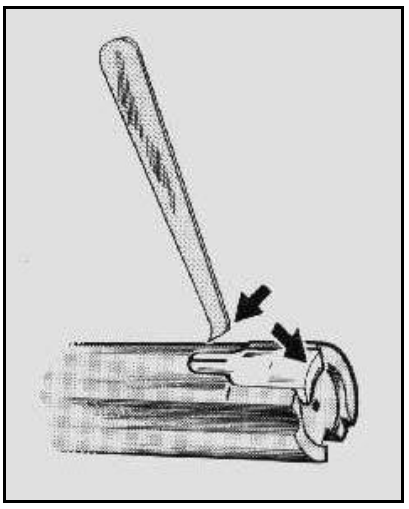
- Låsstycke – Bolt carrier
- Sikte – Sight
- Gasrör – Gas tube
- Gaskanal – Gas cylinder

The front end of the barrel has a muzzle brake, basically consisting of a cylindrical part, perforated by a series of holes. The muzzle brake reduces felt recoil.
The muzzle plug is screwed on to the muzzle. The sight holder is fastened between the plug and the sight base. The sight holder locks the sight in place on the sight base.The muzzle plug can be removed with the universal tool. The muzzle plug and the sight holder should not be removed when performing daily (general) maintenance.
The cleaning rod is seated in the forend below the barrel.

©2000 Anders & Petter.



- Mynningsbroms – Muzzle brake
- Ståndmärke med ritsa – Front sight alignment mark
- Kornskruv – Front sight screw
- Korn – Front sight
- Kornhållare – Front sight carrier
- Mynningspropp – Muzzle plug
- Kornklack – Front sight base
- Läskstång – Cleaning rod



Removal of firing pin;

Push out the retaining pin. Push against the non-slotted end.
Remove the firing pin and spring.

The firing pin should not be removed for general maintenance.

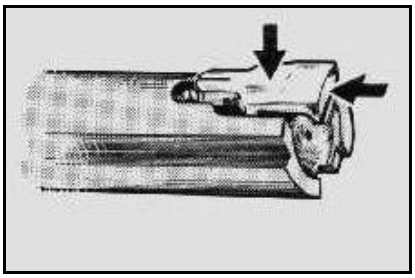
Removal of extractor;

Take out the extractor tool from the tool case.
Insert the tool into the slot in the extractor with the pointed end against the extractor pin (see picture above).
Push the pin down and remove the extractor by tilting it down across the bolt face.

The extractor should only be removed if it (or the spring) needs replacing.

©2000 Anders & Petter.

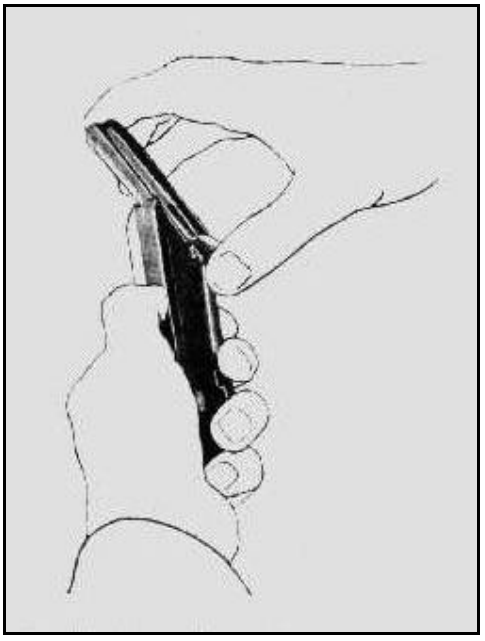
3. Assembly



The extractor is installed in the bolt as follows;

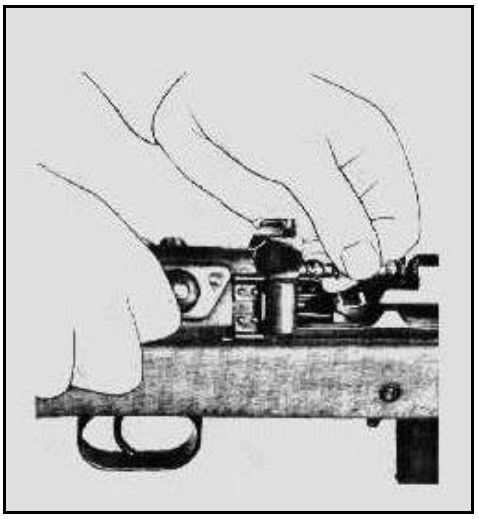
Place the extractors lower inside edge on the pinhead. Note that the head should not be placed in the cut on the underside of the extractor.
Push the extractor straight down (compress the spring) until it is lined up with it's slot in the bolt.
Still holding it down, push it in until the pin slides into it's position.

The firing pin is inserted into the bolt with the flat surface positioned so that the retaining pin can be inserted.



Aided by the picture above, assemble the bolt and bolt carrier.
Insert the bolt assembly into the receiver, as far as it goes. If the magazine has not been removed the follower must be pushed down while doing this.
Fit the cover and push it forward until it locks to the bolt carrier. To avoid damage to the recoil spring and rod make sure that they are properly guided into the slot in the carrier.
Hold the safety lever pointing straight rearwards, insert the receiver cap (safety assembly) and turn the safety to the left.
Hold the cover. Push in the locking latch and slowly release the cover.
Release the trigger and turn the safety on.
Insert the magazine.

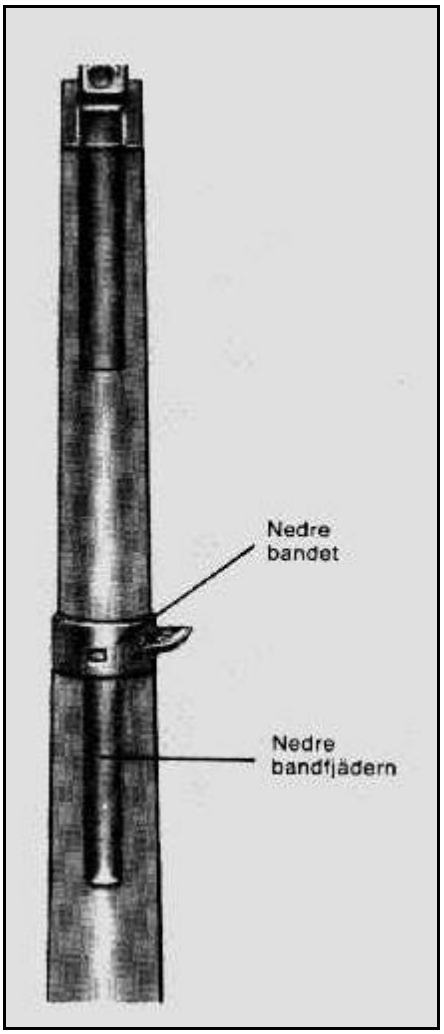
©2000 Anders & Petter.



4. Sights

The sight has two range tags, one for spitzer (torped) ammunition and one for round nose (ogival).Which one is installed can be seen between the sight screw and the range window. The bullet image (spitzer or round nose bullet) should match the ammunition used. With the sight screw the sight can be adjusted for every 100 m. From 100 to 700 m with spitzer ammunition, or 100 to 600 m with round nose.
The range tags are changed as follows;
Push in the lower barrel band spring to release the band.
Pull the barrel band forward. If needed, lightly tap the band.
Lift the forward part of the hand guard and remove it.
Remove the sight screw and the range tag inside it.
Insert the proper range tag.
Reinstall the parts in reverse order.

©2000 Anders & Petter.



The sight and the sight base have alignment marks. When the rifle is sighted in, these two should normally be lined up with each other.
If windage needs to be adjusted, proceed as follows;
Release the muzzle plug 3-4 turns.
Using the universal tool, turn the front sight screw right (left) if point of impact is to be moved to the right (left). I full turn of the screw equals 8,5 cm at 100 m distance. Note that the screw has some play. Count the turns from where the screw starts to pull.
Elevation is set to achieve a point of impact 10 cm above point of aim at 100 m. Elevation adjustments should only be carried out by an armourer.

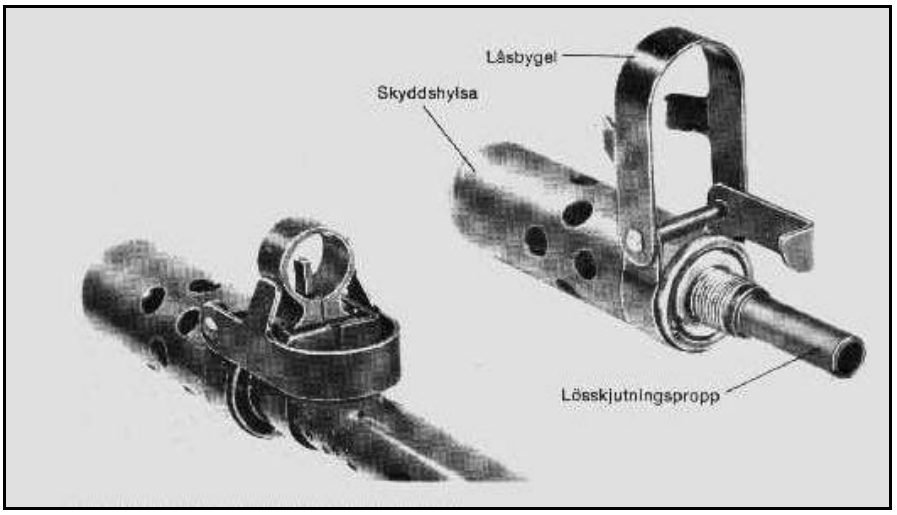
6. Bayonet

The bayonet is attached to the rifle by placing the handle over the cleaning rod and the ring over the muzzle. Then push it down until it locks.. To remove the bayonet, pull out the lock button and lift it off.

7. Blank firing device

The blank firing device *must* be used when shooting blank ammunition.

©2000 Anders & Petter.

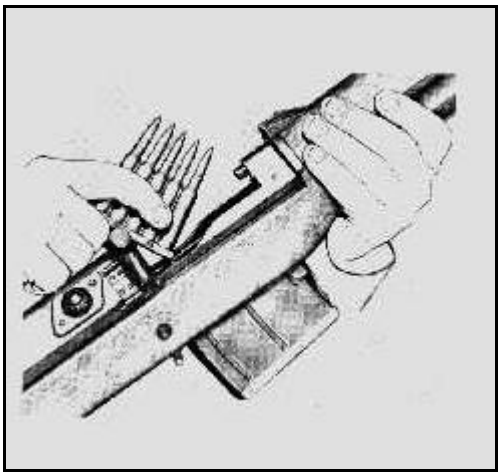


Installation of blank firing device;
Remove the muzzle plug, but not the sight carrier. Screw on the device. To avoid damage to the threads make sure it is turned all the way in. Push the locking tab down over the sight until it snaps into place. Remove in the reverse order.

8. Shooting gallery practice & semi-live ammunition

Gallery (kammarammunition) and semi-live (practice) ammunition is used during certain training. This ammunition does not produce enough pressure to reliably cycle the action. Reloading should instead be performed manually as follows;
Hold the rifle (in “fire” mode) at the ready.
Push the receiver cover forward to locking position.
Cycle the action.

9. Loading



From standing, hold the rifle in the left hand with the muzzle facing slightly upwards and the stock supported against the waist or belt. With the right hand;
Turn the safety on.
Push the receiver cover forward until it locks to the bolt carrier.
Pull the cover back (action opens).
Insert a clip into its cut-out.
With the thumb as close to the clip as possible, push the rounds down into the magazine.
Remove the clip and insert another one.
Repeat.
Turn the safety off.
Pull the cover back.

©2000 Anders & Petter.

Turn the safety on.

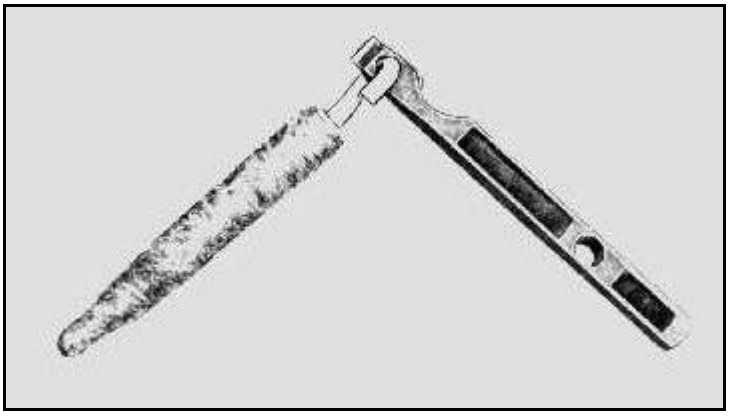
10. Unloading

Grip the rifle with the left hand around the receiver behind the magazine.
With the right hand;
Turn the safety on.
Push the cover forward until it locks with the bolt carrier.
Pull the cover back. The chambered round will then eject to the right. The left hand fingers should be placed to catch the round. Take it with the right hand.
Repeat this procedure until the magazine is empty.
Push down the cartridge follower and then push the cover forward.
With the thumb, push in the cover locking lever and slowly release the cover to the rear.
Turn the safety off, release the trigger and turn the safety on.

IMPORTANT NOTICE:
Do not forget to make sure that the safety is on before poking with your fingers inside the receiver (when loading or unloading). If you ignore this advice you will have a very painful experience often referred to as a "Ljungman thumb" (Ed.'s note)

11. Cleaning

The chamber and the magazine should always receive special attention. The chamber is cleaned with the cleaning tool. The magazine is cleaned by pushing down the follower and then wiping out the inside.



Lube the magazine with # 042 lubricant. Cartridges and action should be lubed when loading the rifle. During longer firing pauses the chamber should be cleaned with the tool and lubed with # 042 lubricant.

12. Stoppages

If a malfunction occurs, proceed as follows;
Keep the rifle at the ready position.
Note; if a dud round occurs the rifle should be kept in this position for at least 5 seconds before any further action is taken.
Turn the safety on.
Open the action. Check that a case or a cartridge ejects when doing so.
Turn the safety off and push the cover back so that the bolt assembly slams home. While doing this, check that a cartridge is chambered and that the bolt is fully forward.
Continue firing.

If another malfunction occurs, or if the bolt does not close properly, repeat the above process and recover the case or cartridge that is ejected. Then check the following;

©2000 Anders & Petter.

Check the primer for strike marks. If it looks normal, the ammunition is probably faulty. Continue firing. If there is no mark in the primer, replace the firing pin.

If the case remains in the chamber the extractor is faulty. Replace extractor.
If the case is extracted but not ejected, the ejector is probably faulty. The ejector should only be replaced by an armourer.

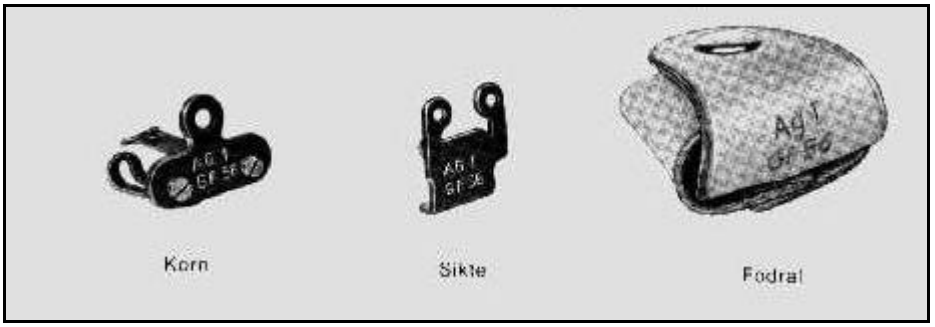
If there is no cartridge in the chamber the magazine might be dirty. Clean the magazine.

If the bolt does not close completely it might be because the chamber is dirty. Clean the chamber. If the bolt is far from closing (at least 1 cm of the case visible) there is probably case neck remnants in the chamber. The chamber must in most cases be cleaned out by an armourer.

13. Function

When the rifle is loaded and ready to fire the bolt assembly is in the forward position and a cartridge is in the chamber. The bolt carrier pushes down on the rear end of the bolt in front of the locking lug in the bottom of the receiver. The bolt carrier encloses the rear end of the gas tube.
The hammer is locked back against the sear.
When the trigger is released the hammer strikes against the firing pin whereupon the shot is fired. The powder gases pushes the bullet through the bore and at the same time pushes against the bolt. The bolt does not move as it is locked against the locking lug. When the bullet passes the gas cylinder gas flows through the gas tube and pushes the bolt carrier back. When the carrier has moved a few millimeters back the bolt is lifted out of it's lock and follows the carrier backwards.
During the rearward movement the empty cartridge case is pulled out of the chamber and thrown out of the weapon. The hammer is cocked and the recoil spring is squeezed together. The rearward movement is stopped by the receiver cap.
When the movement has stopped the recoil spring pushes the bolt assembly forward. A cartridge is thereby pushed out of the magazine and into the chamber. The bolt assembly stops in the forward locked position.
To be able to fire once again the trigger has to be released so that it grips the sear.
When the magazine is empty the cartridge follower pushes up the bolt lock so that the bolt assembly stops in the rear position.

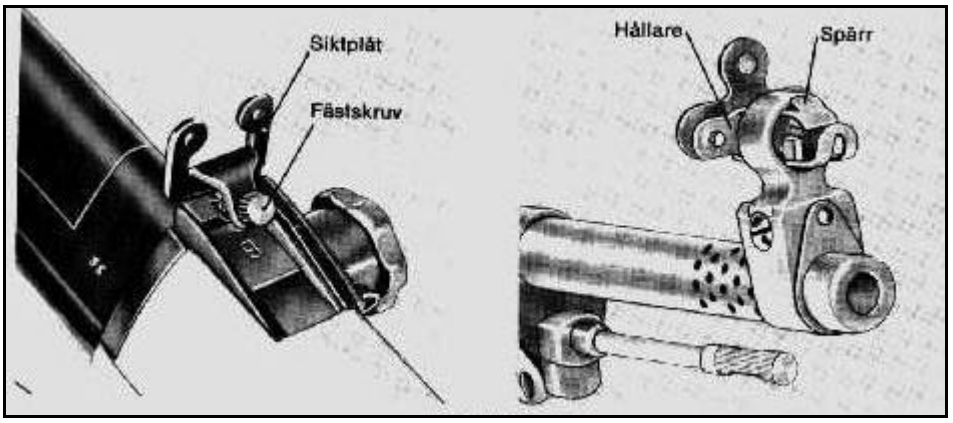
14. Low-light sights



- Korn – Front sight
- Sikte – Rear sight
- Fodral – Case

©2000 Anders & Petter.

Install the sights as the picture below shows.



- Siktplåt – Sight plate
- Fästskruv – Lock screw
- Hållare – Carrier
- Spärr – Lock tab

Sight adjustment;
Elevation is adjusted by turning the rifle's sight screw. If the sight is raised (lowered) 100 m point of impact with the night sights will be raised (lowered) 5 cm (10 cm) at 50 m (100 m).
Windage is adjusted by loosening the sight plate's adjustment screws and moving the plate sideways. If the rifle hits to the right (left) the plate is moved to the right (left). Moving the sightplate 1 mm will move point of impact 7,5 cm (15 cm) at 50 m (100 m).

©2000 Anders & Petter.